

Drinking Water Consumer Confidence Report

For Calendar Year 2022



Presented By

CITY OF NORTH
Ridgeville
EST 1810

Be In The Know With Your Public Water System

A Note from the Engineering Division

One of the City of North Ridgeville's top priorities is ensuring that our water consumers (you) have clean, safe drinking water. For 2022, your drinking water has met all of the Ohio EPA standards. These efforts would not be possible without the diligent, experienced individuals at the City overseeing every aspect of the operation, maintenance and planning of our public water system.

The Public Works Department has a knowledgeable team of drinking water professionals, including one certified Water Distribution Class 2 Operator and four additional Water Distribution Class 1 Operators, that help ensure the community is receiving safe drinking water. In 2022, our water crews attended to 52 water main breaks, 18 valve box replacements, 25 service line repairs, 11 hydrant replacements, 103 gate valves exercised, performed maintenance on our water tower, created new distribution areas through water valve adjustments, collected over 500 water lab passing samples and performed over 6,000 water main and appurtenance locates for OUPS requests.

Working closely, in conjunction with the Public Works Department, the Engineering Division ensures that our water distribution network is operating as efficiently as possible. Engineering collects and maintains all asset data for the existing water mains in the citywide Geographical Information System (GIS). Engineering uses the collected data, such as pipe age and material, break history, criticality and consequence of failure, to assess the existing conditions and make recommendations for capital improvements. In the last five years, Engineering oversaw the design and/or construction of approximately \$6 million dollars of public water works improvements, including 27,120 feet of new water main and 117 hydrant replacements. Engineering also makes regular updates to the water distribution modeling software and oversees the OEPA drinking water reporting.

If you have any questions, comments, or concerns, please let us know.

Sincerely,

Christina Eavenson, City Engineer

Engineering Division, (440) 353-0842



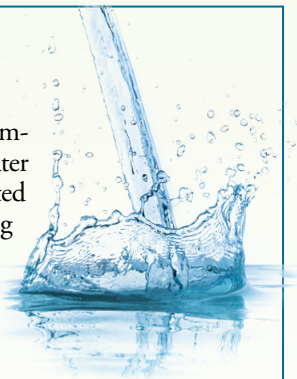
Introduction

The City of North Ridgeville is dedicated to ensuring that our Public Water System is operating in accordance with Ohio EPA's Drinking Water Program.

As part of the Safe Drinking Water Act, the City of North Ridgeville is required to inform our community on an annual basis about where our water is supplied from, the quality of that water, any detected contaminants and any possible health effects. The City of North Ridgeville's drinking water has met all of the Ohio EPA Standards for the calendar year 2022.

About Your Drinking Water

The EPA requires regular sampling to ensure drinking water safety. North Ridgeville collected over 500 samples for testing during 2022. Samples were collected from various locations and were tested for a number of different contaminants of which all results were either nondetectable or of acceptable levels. Results are included in the enclosed table. North Ridgeville's suppliers, ALRW and EPWS, are also obligated to conduct their own sampling and testing.



Source Water Information

During 2022, the City of North Ridgeville purchased water from two main suppliers:

- Avon Lake Regional Water (ALRW)
413 Million Gallons
- City of Elyria Public Water System (EPWS)
615 Million Gallons

Most water consumers in our City receive a "blend" of water from our two main suppliers based on their proximity to these sources, while less than 5% receive their water from a different supplier. The City's two main suppliers, Avon Lake Regional Water (ALRW) and the City of Elyria Public Water System (EPWS), both have water treatment plants and both receive their water from intakes in Lake Erie, a surface water supply.

Less than 5% of the City's water consumers are directly connected to water distribution systems owned and operated by other entities, including the City of Avon Public Water System (Avon) and Rural Lorain County Water Authority (RLCWA). Avon receives their water from ALRW while RLCWA receives their water from ALRW, the Village of New London and the City of Ashland. The water consumers that are directly tapped off one of these two systems will get a copy of the respective Consumer Confidence Report (CCR) from their supplier.

If you need a copy of Avon's 2023 CCR, contact Avon Utilities at (440) 933-6226 or for RLCWA's 2023 CCR, contact their office at (440) 355-5121.

Source Water Assessment Information

(City of Elyria Public Water System, EPWS)

Although the EPWS's surface water intakes are located offshore in Lake Erie, the proximity of Beaver Creek and Martin's Run increases the susceptibility of the source water to contamination. Based on information compiled for the source water assessment, the City of Elyria's drinking water source protection area is susceptible to immediate and future contamination from municipal wastewater treatment discharges, air contamination deposition, runoff from residential, agricultural and urban areas, oil and gas production, transportation, leaking underground storage tanks, accidental releases and spills from railcars and vehicular traffic, as well as from commercial shipping operations and recreational boating.

It is important to note that this assessment is based on available data and therefore may not reflect current conditions in all cases. Water quality, land uses and other activities that are potential sources of contamination may change with time. Although the source water (Lake Erie) for the EPWS was determined to be susceptible to contamination, historically, the City of Elyria's water treatment plant has effectively treated this source water to meet drinking water quality standards.

Please contact EPWS at (440) 324-7669 if you would like more information about their source water assessment or would like a copy of their 2023 CCR.

Source Water Assessment Information

(Avon Lake Regional Water, ALRW)

Avon Lake Regional Water (ALRW) receives its drinking water from Lake Erie. In Avon Lake, there are two separate intakes to ensure our ability to pump from this virtually endless source of quality raw water. Avon Lake Regional Water treats water to meet EPA drinking water quality standards.

For the purposes of source water assessments, all surface waters are considered to be susceptible to contamination. By their nature, surface waters are accessible and can be readily contaminated by chemicals and pathogens with relatively short travel times from the source to the intake. Based on the information compiled for this assessment, the Avon Lake Water System drinking water source protection area (CAZ) is susceptible to contamination from municipal waste water treatment discharges, industrial waste water discharges, air contamination deposition, combined sewer overflows, runoff from residential, agricultural and urban areas, oil and gas production and transportation and accidental releases and spills from rail and vehicular traffic, as well as from commercial shipping operations and recreational boating.

It is important to note that this assessment is based on available data and therefore may not reflect current conditions in all cases. Water quality, land uses and other activities that are potential sources of contamination may change with time. While the source water for the City of Avon Lake is considered susceptible to contamination, historically, the Avon Lake Public Water System has effectively treated this source water to meet drinking water quality standards.

Please contact ALRW at (440) 933-3229 if you would like more information about their source water assessment or would like a copy of their 2023 CCR.

What Are Sources Of Contamination To Drinking Water?

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include: (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife; (B) Inorganic contaminants, such as salts and metals, which can be naturally- occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming; (C) Pesticides and herbicides, which may come from a variety of sources, such as agriculture, urban storm water runoff and residential uses; (D) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, can come from gas stations, urban storm water runoff and septic systems; (E) Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, USEPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Federal Environmental Protection Agency's Safe Drinking Water Hotline, (800) 426-4791.

Who Needs To Take Special Precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders or some elderly and infants, can be particularly at risk for infection. These people should seek advice about drinking water from their health care providers. EPA and CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800) 426-4791.

Lead Educational Information

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of North Ridgeville's Public Water System is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at (800) 426-4791 or at <http://www.epa.gov/safewater/lead>.



Monitoring, Reporting Violations & Enforcement Actions

This notice is to inform you that Avon Lake Regional Water did not monitor and report results for the presence of Cyanobacteria in the public water system during the weeks of November 13, November 20 and November 27, 2022, as required by the Ohio Environmental Protection Agency. You do not need to take any action in response to this notice.

What is being done?

Upon being notified of this violation, the water supply was required to have the drinking water analyzed for total Cyanobacteria according to their current monitoring schedule. The water supplier will take steps to ensure that adequate monitoring will be performed in the future. A sample will be collected on June 2, 2023. The sample results and/or additional information may be obtained by contacting Avon Lake Regional Water at (440) 933-6226 or mailing them at Avon Lake Regional Water, 201 Miller Road, Avon Lake, OH 44012.

How To Participate In Decisions Concerning Your Drinking Water

North Ridgeville City Council meets the first and third Mondays, January through December. The meetings take place at 7:00 pm at City Hall, 7307 Avon Belden Road, North Ridgeville, OH 44039. Please visit www.nridgeville.org for City Council meeting information. Public participation and comment are encouraged. For further participation or more information about your drinking water, contact Brian O'Grady, Water/Sewer Foreman, at (440) 353-1559.



License To Operate (LTO) Status Information

In 2022, the City of North Ridgeville's Public Water System had a current, unconditioned license to operate our water system.

The Importance Of Backflow Prevention

In accordance with the Ohio Administrative Code Chapter 3745-95, the City of North Ridgeville is required to protect our Public Water System from cross-connections and prevent backflow situations. Cross-connections happen when a possible source of contamination comes in contact with the Public Water System by means of backflow or pressure reversal. Some common backflow hazards include hose connections to chemical solution aspirators, chemically treated heating systems, hose connections to a water outlet or laundry tub, hose connections to livestock feeding areas, source connections to swimming pools, hot tubs or spas and lawn irrigation systems.

In order to prevent backflow situations in your home or business, the following items should be implemented:

- Be aware of and eliminate cross-connections where possible.
- Maintain air gaps (do not submerge hoses).
- Use vacuum breakers on all fixtures where a hose can be connected.
- Install approved, testable backflow prevention devices on hazardous situations, including lawn irrigation systems.
- Do not create a connection between auxiliary water systems (well, cisterns, etc.) and the Public Water System.

North Ridgeville requires that all backflow devices be inspected and tested by a qualified person annually with reporting results submitted to the Engineering Division by June 15.

REGULATED SUBSTANCES									
				AVON LAKE REGIONAL WATER		CITY OF ELYRIA			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCLG [MRDLG]	MCL [MRDL]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Microbiological Contaminants (Tested by wholesaler at their entry point)									
Turbidity (NTU) ¹	2022	NA	TT	0.16	0.02-0.16	0.13	0.05-0.13	No	Soil Runoff
Turbidity (% samples meeting standard)	2022	NA	TT	100%	100%	100%	100%	No	Soil Runoff
Total Organic Carbon (TOC) ²	2022	NA	TT	1.24	1.00-1.60	1.24	1.00-1.44	No	Naturally present in the environment
Inorganic Contaminants (Tested by wholesaler at their entry point)									
Barium (ppm)	2022	2	2	0.02	NA	0.019	0.0-0.019	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	2022	4	4	0.75	0.75-1.24	1.028	0.84-1.13	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate (ppm)	2022	10	10	0.92	<0.10-0.92	0.750	<0.1-0.75	No	Run off from fertilizer use, Leaching from septic tanks, sewage; Erosion of natural deposits
Disinfectants and Disinfection Byproducts³ (City of North Ridgeville)									
Total Chlorine (ppm)	2022	MRDLG = 4	MRDL = 4	1.11		0.96-1.20		No	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb) ⁴	2022	NA	60	19.78		11.0-25.7		No	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb) ⁴	2022	NA	80	42.60		20.7-61.4		No	By-product of drinking water disinfection
Lead and Copper (City of North Ridgeville)									
CONTAMINANTS (UNITS)	YEAR SAMPLED	AL	INDIVIDUAL RESULTS OVER THE AL	AMOUNT DETECTED (90TH %ILE)	VIOLATION	TYPICAL SOURCE			
Copper (ppm)	2022	1.3	NA	0.027	No	Erosions of natural deposits; leaching from wood preservatives; Corrosions of household plumbing systems	Zero out of 30 samples were found to have copper levels in excess of the copper action level of 1.3 ppm.		
Lead (ppb)	2022	15	NA	0	No	Corrosion of household plumbing systems; erosion of natural deposits	Zero out of 30 samples were found to have lead levels in excess of the lead action level of 15 ppb.		

In 2022 North Ridgeville PWS had a current, unconditioned license to operate our water system from the Ohio EPA.

¹Turbidity is a measure of the cloudiness of water and is an indication of the effectiveness of our filtration system. The turbidity limit set by the EPA is 0.3 NTU in 95% of the samples analyzed each month and shall not exceed 1 NTU at any time. As reported above the Avon Lake WTP highest recorded for 2022 was 0.16 NTU and the lowest monthly percentage of samples meeting the turbidity limits was 100%.

²The value reported under "Level Found" for Total Organic Carbon (TOC) is the lowest ratio between percentage of TOC actually removed to the percentage of TOC required to be removed. This removal ratio is calculated as the ratio between the actual TOC removal and the TOC rule removal requirements and other parameters. A value of at least one (1) indicates that the water system is in compliance with TOC removal requirements.

³These contaminants level found is the highest compliance value based on a running annual average. This average includes results from 2021 & 2022.

⁴Disinfection byproducts are the result of providing continuous disinfection to your drinking water and form when disinfectants combine with organic matter naturally occurring in the source water. Disinfection byproducts are grouped into two categories, Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA5). USEPA sets standards for controlling the levels of disinfectants and disinfectant byproducts in drinking water, including both TTHMs and HAA5s.

Speaking Of Water...

Are You Aware Of These Common Leaking Culprits That Could Be Adding Senseless Dollars To Your Utility Bill?

(Based on 2023 residential water rates)



Dripping Water Faucet

~10 cf/month
\$0.45/month



Leaky Shower Head

~70 cf/month
\$3.16/month



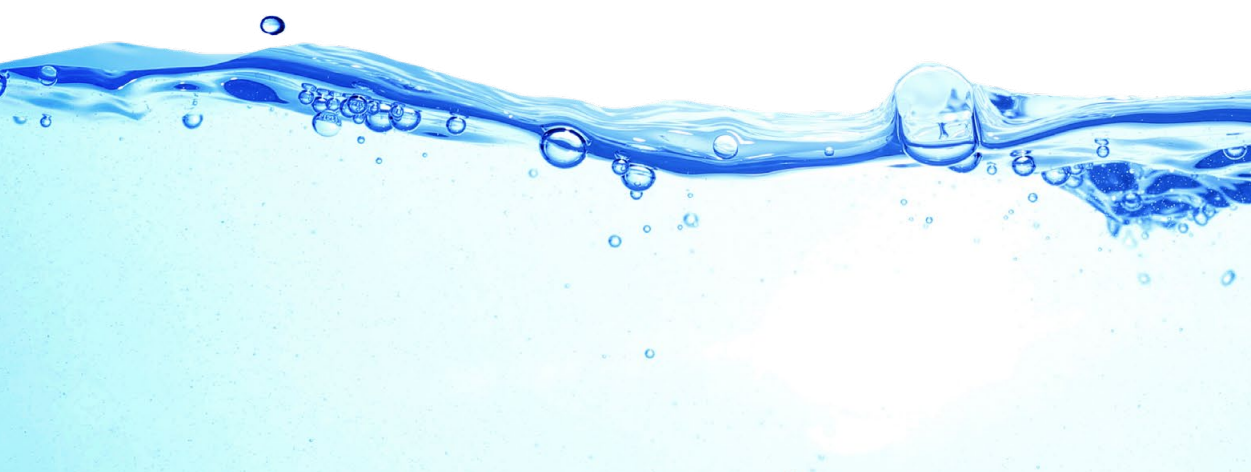
Leaky Irrigation Sprinkler Head

~300 cf/month
\$13.56/month



Leaky Toilet

~800 cf/month
\$36.16/month



Definitions

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Contaminant: Any physical, chemical, biological, or radiological substance or matter in water.

Maximum Contaminant Level (MCL): The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG): The level of contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL): The highest residual disinfectant level allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of residual disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA: Not Applicable

ND: Not Detected

NTU: Nephelometric Turbidity Units

Parts per billion (ppb) or Micrograms per Liter (ug/L) are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.

Parts per million (ppm) or Milligrams per Liter (mg/L) are units of measure for concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 days.

PFAS: Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals applied to many industrial, commercial and consumer products to make them waterproof, stain resistant, or nonstick. PFAS are also used in products like cosmetics, fast food packaging, and a type of firefighting foam called aqueous film forming foam (AFFF) which are used mainly on large spills of flammable liquids, such as jet fuel. PFAS are classified as contaminants of emerging concern, meaning that research into the harm they may cause to human health is still ongoing.

Total Organic Carbon (TOC) has no health effects. However, TOC provides a medium when the water is disinfected for the formation of disinfection byproducts. TOC removal early in the treatment plant is required.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water. For example Avon Lake Regional Water adds orthophosphate to maintain compliance with the lead and copper rule.

VOC: Volatile Organic Chemicals

WTP: Water Treatment Plant

The "<" Symbol: A symbol that means less than. A result of <5 means that the lowest level that could be detected was 5 and the contaminant in that sample was not detected.